



**Methicillin-Resistant *Staphylococcus aureus* (MRSA) Infections Reporting in Illinois Acute Care Hospitals, 2013**

As of January 1, 2012, all Illinois hospitals began mandated reporting of blood cultures positive for MRSA using the Center for Disease Control and Prevention’s National Healthcare Safety Network (NHSN) Multidrug-Resistant Organism (MDRO) Laboratory-identified (LabID) Event module. The LabID event surveillance method enables facilities to report proxy measures for healthcare acquisition of infections based on data obtained from the laboratory without clinical evaluation of the patient.

MRSA bacteremia data are summarized using the standardized infection ratio(SIR), a summary statistic used to measure relative difference in healthcare facility-onset (HO) MDRO LABID Events occurrence during a reporting period, in this case 2013, compared to a common referent period (national data collected during 2010-2011).<sup>1</sup> The standardized infection ratio adjusts for factors found to be significant in predicting HO MRSA infections such as, medical school affiliation, facility bed size, and the prevalence rate of Community Onset (CO) MRSA using a risk model.<sup>1</sup> For additional information on Standardized Infection Ratios (SIRs), and confidence intervals (CIs), see the methodology section of the Illinois Hospital Report Card website.

**Table 1. Summary of HO MRSA bloodstream infections Data, 2012-2013**

Reporting Year	# Facilities Reporting	# MRSA Infections (Observed)	# MRSA Infections (Predicted)	SIR (95% Conf. Interval)	% Change (SIR) (95% Conf. Interval)	p-value	Statistical Interpretation (% Change)
2012	179	358	419.80	0.853 (0.768, 0.945)	16.2% (0.718, 0.978)	0.0251	Significant Decrease
2013	183	293	408.56	0.715 (0.636, 0.800)			

Table 1 provides a snapshot summary of HO MRSA bloodstream infections in Illinois acute care hospitals from 2012 through 2013.

**Summary**

In 2013, 293 HO MRSA infections were reported compared to 409 predicted, for an SIR of 0.715 (95% CI 0.636, 0.800). This translates to a significant reduction of 28% compared to the national referent period noted above. In addition, there was a significant decrease of 16.2% in the number of HO MRSA infections reported in Illinois acute care hospitals (based on SIR) compared to the previous year (2012).

**References:**

<sup>1</sup> Dudeck MA, Weiner LM, Malpiedi PJ, et al. Risk Adjustment for Healthcare Facility-Onset C. difficile and MRSA Bacteremia Laboratory-identified Event Reporting in NHSN. Published March 12, 2013. Available at: <http://www.cdc.gov/nhsn/pdfs/mrsa-cdi/RiskAdjustment-MRSA-CDI.pdf>